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DEPARTMENT OF THE AIR FORCE

JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1990/1991 BIENNIAL BUDGET ESTIMATES SUBMITTED TO CONGRESS JANUARY 1989

AD-A208 997



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Aircraft Procurement, Air Force

DEPARTMENT OF THE AIR FORCE
AIRCRAFT PROCUREMENT, AIR FORCE
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AIRCRAFT PROCUREMENT, AIR FORCE

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment and training devices, spares parts, and accessories therefor; specialized equipment; expansion of public and private plants, Government-owned equipment and installation therefor in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired and construction prosecuted thereon prior to the approval of title; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things, \$17,975,000,000, to remain available for obligation until September 30, 1992, of which \$693,600,000 shall be available only for the Air National Guard and Air Force Reserve.

Further, for the foregoing purposes, \$20,628,400,000, of which \$674,500,000 shall be available only for the Air National Guard and Air Force Reserve, to become available for obligation October 1, 1990, and to remain available for obligation until September 30, 1993

Further, for the foregoing purposes, only for multi-year procurement, \$10,456,751,000, to become available for obligation on October 1, 1991 and to remain available for obligation until September 30, 1994; \$12,896,135,000, to become available for obligation on October 1, 1992 and to remain available for obligation until September 30 1995; and \$10,766,265,000 to become available on October 1, 1993 and to remain available for obligation until September 30, 1996. (10 U.S.C 2271-79, 2353, 2386, 2663, 2672, 2672a, 8013, 8062, 9501-02, 9532, 9741-42; 50 U.S.C 451, 453, 455; Department of Defense Appropriation Act 1989; additional authorizing legislation to be proposed).



Account No.	NTES	DATE
By	DATE	
Dist	A-1	

09 Jan 89

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft	4,362,268	7,635,644	8,365,940	10,752,409
00.0201	Airlift aircraft	654,200	995,571	1,765,957	2,421,353
00.0301	Trainer aircraft		9,525	147,475	178,272
00.0401	Other aircraft	87,200	89,840	54,822	90,281
00.0501	Modification of inservice aircraft	1,933,207	2,275,468	2,244,969	2,183,495
00.0601	Aircraft spares and repair parts	2,348,176	2,994,123	3,966,968	3,680,918
00.0701	Aircraft support equipment and facilities	3,445,477	1,619,315	1,428,919	1,321,672
00.9101	Total direct program	12,830,528	15,619,486	17,975,000	20,628,400
01.0101	Reimbursable program	228,748	206,109	213,100	222,400
10.0001	Total	13,059,276	15,825,595	18,188,100	20,850,800
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-76,528	-65,955	-68,202	-71,172
13.0001	Trust funds(-)	-152,046	-140,094	-144,838	-151,168
14.0001	Non-Federal sources(-)	-174	-60	-60	-60
17.0001	Recovery of prior year obligations				
21.4002	Unobligated balance available, start of year:				
21.4003	For completion of prior year budget plans				
21.4007	Available to finance new budget plans	-989,422	-112,087		
22.4001	Reprogramming from/to prior year budget plans	-316,103			
22.4001	Unobligated balance transferred to other accounts	-65,919	112,087		
24.4002	Unobligated balance available, end of year:				
24.4003	For completion of prior year budget plans	112,087			
25.0001	Available to finance subsequent year budget plans	221,236			
25.0001	Unobligated balance lapsing				
39.0001	Budget authority	11,792,407	15,619,486	17,975,000	20,628,400
Budget authority:					
40.0001	Appropriation				
40.0004	Reduction pursuant to P.L. 100-463	12,956,827	15,922,499	17,975,000	20,628,400
40.0017	Appropriation rescinded (unobligated balance)		-5,131		
41.0001	Transferred to other accounts(-)	-938,121			
42.0001	Transferred from other accounts	-227,711	-385,782		
		1,412	67,900		
43.0001	Appropriation (adjusted)	11,792,407	15,619,486	17,975,000	20,628,400
Relation of obligations to outlays:					
71.0001	Obligations incurred, net				
72.4001	Obligated balance, start of year				
74.4001	Obligated balance, end of year				
77.0001	Adjustments in expired accounts				
78.0001	Adjustments in unexpired accounts				

Aircraft Procurement, Air Force
Program and Financing (in thousands of dollars) SUMMARY

09 Jan 89

Obligations

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft	4,446,493	7,049,400	7,564,149	10,194,578
00.0201	Airlift aircraft	725,442	694,813	1,505,222	2,132,652
00.0301	Trainer aircraft		6,629	111,035	152,056
00.0401	Other aircraft	233,781	88,609	60,511	83,041
00.0501	Modification of inservice aircraft	2,573,962	2,578,248	2,318,449	2,142,385
00.0601	Aircraft spares and repair parts	3,091,034	2,245,732	3,595,173	3,557,395
00.0701	Aircraft support equipment and facilities	4,139,202	2,446,802	1,835,132	1,331,233
00.9101	Total direct program	15,209,914	15,110,233	16,989,671	19,593,340
01.0101	Reimbursable program	295,102	389,088	213,100	222,400
10.0001	Total	15,505,016	15,499,321	17,202,771	19,815,740
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-67,306	-65,955	-68,202	-71,172
13.0001	Trust funds(-)	-141,479	-140,094	-144,838	-151,168
14.0001	Non-federal sources(-)	-347	-60	-60	-60
17.0001	Recovery of prior year obligations	-651,218			
21.4002	Unobligated balance available, start of year:	-7,857,629	-5,727,387	-6,053,661	-7,038,990
21.4003	For completion of prior year budget plans	-989,422	-112,087		
21.4007	Available to finance new budget plans				
22.4001	Reprogramming from/to prior year budget plans	-65,919	112,087		
22.4002	Unobligated balance transferred to other accounts				
24.4002	Unobligated balance available, end of year:	5,727,387	6,053,661	7,038,990	8,074,050
24.4003	For completion of prior year budget plans	112,087			
25.0001	Available to finance subsequent year budget plans	221,236			
25.0001	Unobligated balance lapsing				
39.0001	Budget authority	11,792,407	15,619,486	17,975,000	20,628,400
Budget authority:					
40.0001	Appropriation	12,956,827	15,922,499	17,975,000	20,628,400
40.0004	Reduction pursuant to P.L. 100-463		-5,131		
40.0017	Appropriation rescinded (unobligated balance)	-938,121			
41.0001	Transferred to other accounts(-)	-227,711	-365,782		
42.0001	Transferred from other accounts	1,412	67,900		
43.0001	Appropriation (adjusted)	11,792,407	15,619,486	17,975,000	20,628,400
Relation of obligations to outlays:					
71.0001	Obligations incurred, net	15,295,884	15,293,212	16,989,671	19,593,340
72.4001	Obligated balance, start of year	29,031,477	27,391,258	26,148,570	28,460,041
74.4001	Obligated balance, end of year	-27,391,258	-26,148,570	-28,460,041	-32,168,581
77.0001	Adjustments in expired accounts	-323,403			
78.0001	Adjustments in unexpired accounts	-651,218			

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) SUMMARY

09 Jan 89

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
90.0001	Outlays	15,961,482	16,535,900	14,678,200	15,884,800

Aircraft Procurement, Air Force
Object Classification (in Thousands of dollars) SUMMARY

09 Jan 89

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Direct obligations:					
131.001	Equipment	15,209,914	15,110,233	16,989,671	19,593,340
199.001	Total Direct obligations	15,209,914	15,110,233	16,989,671	19,593,340
Reimbursable obligations:					
231.001	Equipment	295,102	389,088	213,100	222,400
299.001	Total Reimbursable obligations	295,102	389,088	213,100	222,400
999.901	Total obligations	15,505,016	15,499,321	17,202,771	19,815,740

09 Jan 89

Aircraft Procurement, Air Force
Program and Financing (in thousands of dollars) FISCAL YEAR 1986

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft				
00.0201	Airlift aircraft				
00.0401	Other aircraft				
00.0501	Modification of inservice aircraft				
00.0601	Aircraft spares and repair parts				
00.0701	Aircraft support equipment and facilities				
00.9101	Total direct program				
01.0101	Reimbursable program				
10.0001	Total				
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)				
13.0001	Trust funds(-)				
14.0001	Non-Federal sources(-)				
17.0001	Recovery of prior year obligations				
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans				
21.4003	Available to finance new budget plans				
21.4007	Reprogramming from/to prior year budget plans				
22.4001	Unobligated balance transferred to other accounts				
25.0001	Unobligated balance lapsing				
40.0017	Budget authority (Appropriation rescinded) (
				-312,622	
				-275,125	
				88,190	
				221,236	
				-278,521	

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) FISCAL YEAR 1986 09 Jan 89

Identification code 57-3010-0-1-051		Obligations		
Program by activities:		1988 actual	1989 est.	1990 est. 1991 est.
Direct program:				
00.0101	Combat aircraft	737,708		
00.0201	Airlift aircraft	67,253		
00.0401	Other aircraft	124,681		
00.0501	Modification of inservice aircraft	562,469		
00.0601	Aircraft spares and repair parts	496,004		
00.0701	Aircraft support equipment and facilities	442,835		
00.9101	Total direct program	2,430,950		
01.0101	Reimbursable program	84,486		
10.0001	Total	2,515,436		
Financing:				
Offsetting collections (num:				
11.0001	Federal funds(-)	112		
13.0001	Trust funds(-)	10,346		
14.0001	Non-Federal sources(-)	-38		
17.0001	Recovery of prior year obligations	-419,645		
21.4002	Unobligated balance available, start of year:			
21.4003	For completion of prior year budget plans	-2,381,337		
21.4007	Available to finance new budget plans	-312,622		
22.4001	Reprogramming from/to prior year budget plans			
25.0001	Unobligated balance transferred to other accounts	88,190		
	Unobligated balance lapsing	221,236		
40.0017	Budget authority (Appropriation rescinded) (-278,521		

09 Jan 89

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft				
00.0201	Airlift aircraft				
00.0401	Other aircraft				
00.0501	Modification of inservice aircraft				
00.0601	Aircraft spares and repair parts				
00.0701	Aircraft support equipment and facilities				
00.9101	Total direct program				
01.0101	Reimbursable program				
10.0001	Total				
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)				
13.0001	Trust funds(-)				
14.0001	Non-Federal sources(-)				
17.0001	Recovery of prior year obligations				
21.4002	Unobligated balance available, start of year:				
21.4003	For completion of prior year budget plans				
21.4007	Available to finance new budget plans				
22.4001	Reprogramming from/to prior year budget plans				
22.4001	Unobligated balance transferred to other accounts				
24.4002	Unobligated balance available, end of year:				
24.4003	For completion of prior year budget plans				
24.4003	Available to finance subsequent year budget plans				
40.0017	Budget authority (Appropriation rescinded) (

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) FISCAL YEAR 1987

09 Jan 89

Obligations

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft	1,117,116	559,239		
00.0201	Airlift aircraft	4,819	1,262		
00.0401	Other aircraft	27,071	22,639		
00.0501	Modification of inservice aircraft	865,276	604,299		
00.0601	Aircraft spares and repair parts	432,042	35,734		
00.0701	Aircraft support equipment and facilities	1,594,751	428,596		
00.9101	Total direct program	3,841,075	1,651,769		
01.0101	Reimbursable program	128,518	36,329		
10.0001	Total	3,969,593	1,688,098		
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	9,110			
13.0001	Trust funds(-)	221			
14.0001	Non-Federal sources(-)	-135			
17.0001	Recovery of prior year obligations	-231,573			
Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans	-5,476,292	-1,688,098		
21.4003	Available to finance new budget plans	-676,600	-112,087		
21.4007	Reprogramming from/to prior year budget plans				
22.4001	Unobligated balance transferred to other accounts	-54,109	112,087		
Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans	1,688,098			
24.4003	Available to finance subsequent year budget plans	112,087			
40.0017	Budget authority (Appropriation rescinded) (-659,600			

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft	4,362,468			
00.0201	Airlift aircraft	654,200			
00.0401	Other aircraft	87,200			
00.0501	Modification of inservice aircraft	1,933,207			
00.0601	Aircraft spares and repair parts	2,348,176			
00.0701	Aircraft support equipment and facilities	3,445,477			
00.9101	Total direct program	12,830,528			
01.0101	Reimbursable program	228,748			
10.0001	Total	13,059,276			
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-76,528			
13.0001	Trust funds(-)	-152,046			
14.0001	Non-Federal sources(-)	-174			
21.4001/	Unobligated balance available, start of year:				
22.4001	For completion of prior year budget plans	-100,000			
24.4002	Unobligated balance transferred from other accounts (-)				
	Unobligated balance available, end of year:				
	For completion of prior year budget plans				
39.0001	Budget authority	12,730,528			
Budget authority:					
40.0001	Appropriation	12,956,827			
41.0001	Transferred to other accounts(-)	-227,711			
42.0001	Transferred from other accounts	1,412			
43.0001	Appropriation (adjusted)	12,730,528			

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) FISCAL YEAR 1988

09 Jan 89

Obligations

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft	2,591,669	1,176,562	594,037	
00.0201	Airlift aircraft	653,370	552	278	
00.0401	Other aircraft	82,029	3,435	1,736	
00.0501	Modification of inservice aircraft	1,346,217	390,055	196,935	
00.0601	Aircraft spares and repair parts	2,162,988	125,070	60,118	
00.0701	Aircraft support equipment and facilities	2,101,616	890,983	452,878	
00.9101	Total direct program	8,937,889	2,586,657	1,305,982	
01.0101	Reimbursable program	82,098	146,650		
10.0001	Total	9,019,987	2,733,307	1,305,982	
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-76,528			
13.0001	Trust funds(-)	-152,046			
14.0001	Non-Federal sources(-)	-174			
21.4002	Unobligated balance available, start of year:				
22.4001	For completion of prior year budget plans	-100,000	-4,039,289	-1,305,982	
24.4002	Unobligated balance transferred from other accounts (-)				
	Unobligated balance available, end of year:				
	For completion of prior year budget plans	4,039,289	1,305,982		
39.0001	Budget authority	12,730,528			
Budget authority:					
40.0001	Appropriation	12,956,827			
41.0001	Transferred to other accounts(-)	-227,711			
42.0001	Transferred from other accounts	1,412			
43.0001	Appropriation (adjusted)	12,730,528			

Budget Plan (amounts for PROCUREMENT actions programed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft		7,635,644		
00.0201	Airlift aircraft		995,571		
00.0301	Trainer aircraft		9,525		
00.0401	Other aircraft		89,840		
00.0501	Modification of inservice aircraft		2,275,488		
00.0601	Aircraft spares and repair parts		2,994,123		
00.0701	Aircraft support equipment and facilities		1,619,315		
00.9101	Total direct program		15,619,486		
01.0101	Reimbursable program		206,109		
10.0001	Total		15,825,595		
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)		-65,955		
13.0001	Trust funds(-)		-140,094		
14.0001	Non-Federal sources(-)		-60		
21.4002	Unobligated balance available, start of year: For completion of prior year budget plans				
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans				
39.0001	Budget authority		15,619,486		
Budget authority:					
40.0001	Appropriation		15,922,499		
40.0004	Reduction pursuant to P.L. 100-463		-5,131		
41.0001	Transferred to other accounts(-)		-365,782		
42.0001	Transferred from other accounts		67,900		
43.0001	Appropriation (adjusted)		15,619,486		

Aircraft Procurement, Air Force
Program and Financing (in thousands of dollars) FISCAL YEAR 1989

09 Jan 89

Obligations

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft	5,313,599	1,548,033	774,012	
00.0201	Airlift aircraft	692,989	201,714	100,858	
00.0301	Trainer aircraft	6,629	1,930	966	
00.0401	Other aircraft	62,535	18,203	9,102	
00.0501	Modification of inservice aircraft	1,583,894	461,049	230,525	
00.0601	Aircraft spares and repair parts	2,084,928	606,129	303,066	
00.0701	Aircraft support equipment and facilities	1,127,223	328,061	164,031	
00.9101	Total direct program	10,871,807	3,165,119	1,582,560	
01.0101	Reimbursable program	206,109			
10.0001	Total	11,077,916	3,165,119	1,582,560	
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-65,955			
13.0001	Trust funds(-)	-140,094			
14.0001	Non-Federal sources(-)	-60			
21.4002	Unobligated balance available, start of year:				
	For completion of prior year budget plans				
24.4002	Unobligated balance available, end of year:				
	For completion of prior year budget plans				
39.0001	Budget authority	4,747,679	1,582,560		
		15,619,486			
Budget authority:					
40.0001	Appropriation	15,922,499			
40.0004	Reduction pursuant to P.L. 100-463	-5,131			
41.0001	Transferred to other accounts(-)	-365,782			
42.0001	Transferred from other accounts	67,900			
43.0001	Appropriation (adjusted)	15,619,486			

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) FISCAL YEAR 1990

09 Jan 89

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft			8,365,940	
00.0201	Airlift aircraft			1,765,957	
00.0301	Trainer aircraft			147,425	
00.0401	Other aircraft			54,822	
00.0501	Modification of inservice aircraft			2,244,969	
00.0601	Aircraft spares and repair parts			3,966,968	
00.0701	Aircraft support equipment and facilities			1,428,919	
00.9101	Total direct program			17,975,000	
01.0101	Reimbursable program			213,100	
10.0001	Total			18,188,100	
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)			-68,202	
13.0001	Trust funds(-)			-144,838	
14.0001	Non-Federal sources(-)			-60	
21.4002	Unobligated balance available, start of year: For completion of prior year budget plans				
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans				
40.0001	Budget authority (Appropriation)			17,975,000	

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) FISCAL YEAR 1990

09 Jan 89

Obligations

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft		5,422,079	2,366,559	
00.0201	Airlift aircraft		1,303,230	235,836	
00.0301	Trainer aircraft		109,105	19,146	
00.0401	Other aircraft		40,572	7,120	
00.0501	Modification of in-service aircraft		1,660,465	293,268	
00.0601	Aircraft spares and repair parts		2,928,926	524,315	
00.0701	Aircraft support equipment and facilities		1,054,193	191,376	
00.9101	Total direct program		12,518,570	3,637,620	
01.0101	Reimbursable program		213,100		
10.0001	Total		12,731,670	3,637,620	
Financing:					
Offsetting collections from:					
11.0001	Federal funds()		-68,202		
11.0001	Trust funds(-)		-144,838		
14.0001	Non-Federal sources(-)		-60		
21.4002	Unobligated balance available, start of year:				-5,456,430
	For completion of prior year budget plans				
24.4002	Unobligated balance available, end of year:				1,818,810
	For completion of prior year budget plans				
40.0001	Budget authority (Appropriation)		5,456,430	17,975,000	

Aircraft Procurement, Air Force
Program and Financing (in Thousands of dollars) FISCAL YEAR 1991

09 Jan 89

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft				10,752,409
00.0201	Airlift aircraft				2,421,353
00.0301	Trainer aircraft				178,272
00.0401	Other aircraft				90,281
00.0501	Modification of inservice aircraft				2,183,495
00.0601	Aircraft spares and repair parts				3,680,918
00.0701	Aircraft support equipment and facilities				1,321,672
00.9101	Total direct program				20,628,400
01.0101	Reimbursable program				222,400
10.0001	Total				20,850,800
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)				-71,172
13.0001	Trust funds(-)				-151,168
14.0001	Non-federal sources(-)				-60
24.4002	Unobligated balance available, end of year:				
	For completion of prior year budget plans				
40.0001	Budget authority (Appropriation)				20,628,400

Aircraft Procurement, Air Force
Program and Financing (in thousands of dollars) FISCAL YEAR 1991

09 Jan 89

Obligations

Identification code	57-3010-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Combat aircraft			7,054,007	
00.0201	Airlift aircraft			1,795,958	
00.0301	Trainer aircraft			131,944	
00.0401	Other aircraft			66,819	
00.0501	Modification of inservice aircraft			1,618,592	
00.0601	Aircraft spares and repair parts			2,730,014	
00.0701	Aircraft support equipment and facilities			975,826	
00.9101	Total direct program			14,373,160	
01.0101	Reimbursable program			222,400	
10.0001	Total			14,595,560	
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)			-71,172	
13.0001	Trust funds(-)			-151,168	
14.0001	Non-federal sources(-)			-60	
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans			6,255,240	
40.0001	Budget authority (Appropriation)			20,628,400	

(In Thousands of Dollars)	
Program Estimate	- FY 91
Program Estimate	- FY 90
Program Actual	- FY 89
Program Actual	- FY 88
	\$ 10,752,409
	8,365,940
	7,635,644
	4,362,268

ACTIVITY: Combat Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulation devices, and other peculiar training and support equipment for modernization of the U.S. combat forces and to improve the efficiency of training programs.

Combat aircraft are required to attain and maintain air superiority, interdict enemy supply lines, provide reconnaissance of enemy forces, and furnish close air support to ground forces. The aircraft can be used to counter a variety of threats and offer options of response ranging from the use of diversified conventional weapons through, in the case of U.S. forces, a variety of nuclear weapons.

The FY 1990 and FY 1991 programs include funds for the procurement of B-2, classified programs, F-15, F-16, MC-130H, and the AC-130U Gunship. The programs also include funds for procurement of flight simulators for F-15 and F-16 aircraft. The B-2, F-15, and F-16 requests are for multiyear procurements.

PART II JUSTIFICATION OF FUNDS REQUESTED

The FY 1990 and FY 1991 funding requirements for procurement of combat aircraft, related support items, and advance procurement in support of the following year's program are: FY 1990 - \$8,365.9 million; FY 1991 - \$10,752.4 million. Details are as follow:

B-2 Advanced Technology Bomber

The B-2 is a multirole strategic weapons system with exceptional range and payload capabilities which is able to perform missions of conventional and nuclear weapons delivery system in both tactical and strategic roles. Deployment of the B-2 will address the national requirement to increase our targeting flexibility, to redress the relative decline of our strategic capabilities, and to revitalize our strategic deterrent forces.

Classified Programs

Classified programs data and detail will be provided through classified channels.

F-15C/D/E (FY 1990 - 36 aircraft, \$1,465.7 million; FY 1990 - 36 aircraft, \$1,439.7 million):

The F-15 is a twin engine, single crew, fixed swept wing aircraft designed specifically for high maneuverability in air-to-air combat. Its two Pratt & Whitney F-100 turbofan engines are each capable of thrust in the 25,000 lb. class. The F-15 is able to reach a dash speed of Mach 2.5. It is equipped with a balanced mix of medium and short range missiles and the M-61 20mm cannon. The F-15 A-D is the primary air superiority fighter in the tactical air forces. Future effectiveness in the air superiority mode will be improved by employment of AMRAAM. The F-15E retains the basic air superiority capability and has air-to-surface weapons capability, as well. The F-15E configuration includes a two man crew with missionized cockpits, Low Altitude Navigation, Targeting, and Infrared for Night (LANTIRN) capability, automatic terrain following/terrain avoidance (auto TF/TA), and other air-to-ground improvements.

F-16C/D (FY 1990 - 150 aircraft, \$3,012.1 million; FY 1991 - 150 aircraft, \$2,855.1 million):

The F-16 Multimission Fighter is a single seat, fixed wing, high performance, single engine fighter aircraft. The design, optimized for the .8 Mach to 1.6 Mach speed range, incorporates advanced technology features to enhance its combat capability while minimizing its acquisition, operating and support costs. The advanced technology features include a blended wing-body and a fly-by-wire flight control system. The design also includes a high visibility, high "g" cockpit. The F-16 armament consists of a 20mm cannon, AIM-9L heat seeking air-to-air missiles, and approximately 11,000 pounds of conventional and guided air-to-surface ordnance. The F-16 is replacing F-4s in the active inventory, as well as, modernizing the reserve forces.

MC-130 (FY 1990 - 2 aircraft, \$236.7 million; FY 1991 - \$43.8 million):

This aircraft is a medium size tactical transport powered by four T-56-A-15 turboprop engines. It has a ferry range of approximately 4,200NM; a service ceiling of 35,000 feet, and a cruise speed of 290 knots. Its cargo compartment length, width and height are 41, 10, and 9 feet, respectively. It can carry a payload of 25,000 pounds. The normal crew of seven consists of a pilot, a copilot, a flight engineer, one navigator, electronic warfare officer, and two loadmasters. Aircraft features include an integral ramp and cargo door, a pressurized crew and cargo compartment, ground and in-flight air conditioning, thermal de-icing system, single-point refueling, and auto pilot. Additional features of this specially modified C-130 are precision navigation with an infrared detection system, terrain following/terrain avoidance radar, electronic counter measures (ECM) subsystems and in-flight refueling.

AC-130U (FY 1990 - 5 aircraft, \$239.0 million; FY 1991 \$0):

The basic aircraft is a C-130H powered by four T-56-A-15 turboprop engines. The AC-130U aircraft will have an enhanced capability, improved reliability, and maintainability, more survivability than the existing AC-130H aircraft and be more deployable than the older AC-130A gunships. The new aircraft subsystems will include precision navigation, target acquisition radar, fire control computers integrated on the 1553B data base, electronic countermeasures, infrared countermeasures, aerial refueling, covert lighting, trainable weapons, and secure communications systems. These subsystems will provide the gunship the capability to strike targets with surgical accuracy, to loiter safely in the target area for extended time periods, and to perform these tasks in night adverse weather conditions. Where practical every effort will be made to adapt off-the-shelf equipment, and to the maximum extent, these subsystems will be common with systems on other Air Force SOF aircraft.

(In Thousands of Dollars)	
Program Estimate	- FY 91
Program Estimate	- FY 90
Program Actual	- FY 89
Program Actual	- FY 88
	\$2,421,353
	1,765,957
	995,571
	654,200

ACTIVITY: Airlift Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft and support items to continue improvement of the U.S. airlift forces. The FY 1990 and FY 1991 programs include funds for the procurement of C-17 and C-27A aircraft.

PART II JUSTIFICATION OF FUNDS REQUESTED

The FY 1990 and FY 1991 fund requirements for procurement of airlift aircraft, related support items, and advance procurement funding in support of the following year's program are: FY 1990 - \$1766.0 million; FY 1991 - \$2421.4 million. Details are as follow:

C-17 (FY 1990 - 6 aircraft, \$1,691.6 million; FY 1991 - 10 aircraft, \$2,345.2 million):

The C-17A is a multi-engine turbo fan wide body aircraft capable of airlifting a substantial payload over intercontinental ranges without refueling and is specifically designed to move outside combat equipment/cargo into and within an austere airfield environment. The C-17 will be capable of performing the full spectrum of airlift missions and is specifically designed to effectively and efficiently operate in both the inter and intratheater environments. The aircraft is equipped with receiver inflight refueling capability to increase its range/payload capability. Configuration variations will permit the aircraft to air deliver a variety of outsize/oversize combat/support equipment. An important aircraft characteristic is the flexibility to perform either the airland or airdrop/extraction mission. The C-17A design employs much existing technology, i.e., FAA certified commercial engines and current civil/military avionics.

C-27A (FY 1990 - 5 aircraft, \$74.4 million; FY 1991 - 5 aircraft, \$76.2 million):

The C-27A Airlift Aircraft program was established to procure a new tactical airlift, light-utility, Short-Takeoff-and-Landing (STOL) aircraft for U.S. Southern Command. The aircraft will be used for daily intratheater airlift requirements in an area where the transportation infrastructure, including developed airfields, is virtually nonexistent in terms of providing force mobility. The aircraft will be able to rapidly deliver troops and cargo into forward areas where only short runways or dirt strips are available and no other aircraft can operate. The C-27A will be an off-the-shelf aircraft, procured competitively.

	(In Thousands of Dollars)	
Program Estimate	- FY 91	\$ 178,272
Program Estimate	- FY 90	147,425
Program Actual	- FY 89	9,525
Program Actual	- FY 88	0

ACTIVITY: Trainer Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulation devices, and support equipment required for flight training.

PART II JUSTIFICATION OF FUNDS REQUESTED

TTTS (FY 1989 - 14 Aircraft, \$147.4 million; FY 1991 28 Aircraft, \$178.3 million

The Tanker Transport Training System (TTTS) is required to implement Specialized Undergraduate Pilot Training (SUPT) in Air Training Command. The TTTS includes commercially available jet aircraft which accommodate an instructor and two students. Under SUPT, students will enter the Tanker-Transport (TT) track or the Bomber-Fighter (BF) track after 85 hours in the T-37 aircraft. The T-38 will be used in the BF track. The TT syllabus includes training in high and low altitude instrument approaches, crew coordination, asymmetric thrust situations, low-level navigation, airdrop fundamentals, airborne rendezvous, and cell formation. This program also provides procurement of Operation Flight Trainers (OFT) and other required training devices.

	(In Thousands of Dollars)
Program Estimate	- FY 91 \$90,281
Program Estimate	- FY 90 54,822
Program Actual	- FY 89 89,840
Program Actual	- FY 88 87,200

ACTIVITY: Other Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of MH-60G helicopter and Civil Air Patrol aircraft in FY 1990 and FY 1991, and long lead advance procurement for E-8B aircraft in FY 1991.

PART II JUSTIFICATION OF FUNDS REQUESTED

The FY 1990 and FY 1991 funding requirements for procurement of other aircraft equipment, related support equipment, and advance procurement funding in support of the following year's program are: FY 1990 - \$54.8 million; FY 1991 - \$90.3 million. Details are as follows:

MH-60G (FY 1990 - 4 Aircraft, \$52.8 million; FY 1991 - 4 aircraft, \$33.0 million)

The MH-60G is a substantially upgraded UH-60A designed to meet a variety of Air Force mission requirements. To upgrade combat mission capability, flexibility, and survivability, the MH-60G has extended range, precision low-level tactical navigation, and improved communication and weapon systems. The MH-60G is capable of a wide range of mission tasking in day and night Visual Meteorological Conditions (VMC) including marginal weather operations. The MH-60G is not capable of operations in adverse weather conditions.

Civil Air Patrol Aircraft (FY 1990 - 38 aircraft, \$2.0 million; FY 1991 - 38 aircraft, \$1.8 million):

These funds will procure commercial new or used propeller driven aircraft for the Civil Air Patrol (CAP). CAP is a private, nonprofit corporation which functions as an official civilian auxiliary of the Air Force. CAP's best known Air Force mission is search & rescue.

E-8B (FY 1991, \$55.5 million):

The Joint Surveillance Target Attack Radar System (Joint STARS) is an Air Force/Army program to field a common radar and attack system to support the Air Land Battle and the Follow-On Forces Attack (FOFA) strategy. The system has both airborne and ground elements to provide the "electronic high ground" from which to detect and track enemy ground forces from the friendly side of the Forward Line of Own Troops. The airborne element consists of E-8 aircraft (modified Boeing 707s) carrying radar, operations and control consoles, and communications equipment. The ground element consists of Ground Station Modules which perform targeting and communications, command, control and intelligence functions. Using its multi-mode radar capability for wide-area Moving Target Indication (MTI) surveillance and Fixed Target Indication (FTI), Joint STARS supports the end-to-end engagement process from initial detection of moving ground vehicles to the precise attack with conventional weapons against a variety of targets.

(In Thousands of Dollars)	
Program Estimate	- FY 91 \$ 2,183,495
Program Estimate	- FY 90 2,244,969
Program Actual	- FY 89 2,275,468
Program Actual	- FY 88 1,933,207

ACTIVITY: Modification of In Service Aircraft

PART I PURPOSE AND SCOPE

This budget activity provides for modification and modernization of in-service aircraft, training devices and support equipment necessary for safety, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at the minimum cost.

PART II JUSTIFICATION OF FUNDS REQUEST

Modifications are necessary to enable the strategic offense, defense, tactical and support forces to maintain superiority over hostile forces, to extend the active service life of aircraft, and to keep abreast of changing mission requirements. To ensure maximum safety for the aircraft and crews and to enhance capabilities of aircraft in a combat environment, modifications are necessary. Modifications are closely examined and priorities established so that only those most essential are accomplished with the limited funds available.

The FY 1990/1991 programs consist of follow-on requirements for previously initiated modifications as well as new start modifications. There is also a significant effort included to improve aircraft survivability in a hostile environment by upgrading the electronic defensive capabilities on various aircraft. Funding is also requested to continue enhancement of peacetime readiness of an aging aircraft inventory. Significant efforts include:

- (1) Modification to provide NAVSTAR Global Positioning System (GPS) capability will begin on the F-16, KC-10, E-4, A-10, F-4, C-135, E-3, and MH-60.

- (2) F-15 C/D Multi-Stage Improvement Program (MSIP).
- (3) Enhancements of Special Operations Forces (SOF) aircraft.
- (4) Avionics Modernization Program for F/FB-111 aircraft to upgrade the bomb navigation system to improve operational readiness by replacing high failure, high cost, and technologically outdated components.
- (5) Incorporation of the AN/ALQ-165 Airborne Self-Protection Jammer (ASPJ) into F-16 C/D Block 40/50 aircraft.
- (6) Replacement of the Malfunction Detection, Analysis and Recording System (MADARS) with state-of-the-art electronics on C-5A aircraft.
- (7) Radar Warning Receiver Update Program for the F-4 weapon system.
- (8) Re-engining additional KC-135 tankers to reduce the airborne refueling shortfall.
- (9) Enhancement of E-3 by incorporating the Electronics Support Measures (ESM) system.

Aircraft modification kits are procured on a phased basis, lead time away from installation which is scheduled concurrently with normal depot maintenance programs to the maximum extent possible. Complex modifications are installed at Air Force depots or contractor facilities. Where the installation tasks are less complex or require a relatively small number of man-hours, they are accomplished in the field by assigned personnel or specialized teams dispatched from the depot or provided by contractors.

The Air Force has aggressively pursued the use of existing modern hardware to upgrade aging aircraft components and competitive procurement for modification hardware to control costs and maximize the benefits from the resources provided for modifications. It has provided firm fixed priced contracts at more attractive prices. The Air Force remains committed to using the pressure of the competitive marketplace to control costs.

B-1B (FY 1990 - \$73.3 million; FY 1991 - \$108.7 million). The FY 1990/1991 program continues funding to incorporate modifications to correct deficiencies identified on the production line as well as funding to incorporate protection for vital systems based on lessons learned attributed to the Instrument Landing System (ILS) and engine icing. FY 1990 program initiates the Short Range Attack Missile (SRAM) II, 1112 Improvement and Anti-icing modifications. The FY 1991 program initiates the Flight Director Computer Optimization, Exhaust Nozzle Wear Improvement and Engine Upgrade modifications.

B-52 (FY 1990 - \$218.7 million; FY 1991 - \$74.3 million). The FY 1990 program includes continuation of modifications for the ALQ-172 electronic countermeasures equipment for the B-52H, integration of Internal Air Launched Cruise Missile Carriage capability, NAVSTAR Global Positioning System and the Very Low Frequency/Low Frequency (VLF/LF) Miniature Receiver Terminals. FY 1990 initiates funding for the weapon system trainer Block I update.

The FY 1991 program continues funding for the VLF/LF Miniature Receiver Terminals, ALQ-172 electronic countermeasures equipment and Weapon System Trainer Update. FY 1991 initiates funding for a reliability/maintainability improvement to Transformer Rectifier Units.

A-7 (FY 1990 - \$56.7 million; FY 1991 - \$22.5 million). FY 1990 provides funding for the Low Altitude Night Attack (LANA) depot capability, Gear Up Warning Improvements and continues the Inertial Measurement System Replacement program. FY 1991 program continues ongoing modification programs and initiates funding for the Simulator Block Update.

A-10 (FY 1990 - \$53.3 million; FY 1991 - \$20.6 million). The FY 1990 program includes the Low Altitude Safety and Targeting Enhancement for ground collision avoidance and starts the NAVSTAR GPS modification. FY 1991 continues the fuel foam safety modification and the NAVSTAR GPS.

F/RF-4 (FY 1990 - \$94.7 million; FY 1991 - \$107.9 million). The FY 1990 program initiates three new modifications: replacement of the current F/RF-4 ALE-46 Radar Warning Receiver (RWR) with a new RWR, NAVSTAR GPS and the F-4G/F-16 Targeting Model. Funding is continued for the Navigation Weapons Delivery System (NWDS) and various safety, reliability and maintainability improvements. FY 1991 funds continue the above new modifications, initiate the Electrical Distribution System Reconfiguration and Environmental Control System modification and continue funding for various safety, reliability and maintainability improvements.

F-16 (FY 1990 - \$254.8 million; FY 1991 - \$254.6 million). The FY 1990 program continues the Multi-Stage Improvement Program to the F-15C/Ds to provide continued combat effectiveness, the Joint Tactical Information Distribution System (JTIDS) and various safety, reliability and maintainability improvements. The latter includes improvements to the Radar Receiver System, Electric Lighting and Circuitry Safety, Wing Fuel Transfer Pump and various modifications that are also being incorporated into the production line F-15E aircraft.

The FY 1991 program continues the Multi-Stage Improvement Program, the AN/ALE-45 Chaff/Flare Dispensers and various reliability improvement modifications. It also begins an HF Communication modification.

F-16 (FY 1990 - \$228.1 million; FY 1991 - \$300.7 million). FY 1990 continues the modifications for the Advanced Radar Warning Receiver, Airborne Self-Protection Jammer and continues several reliability, maintainability and safety modifications. The NAVSTAR Global Positioning System, ALE-47 Flare/Chaff Dispensing System and Standard Ring Laser Gyro modifications will be initiated.

The FY 1991 F-16 program continues to fund all ongoing modifications programs and initiates one reliability and maintainability modification, the Improved Main Aircraft Battery.

F-111 (FY 1990 - \$83.8 million; FY 1991 - \$134.2 million). The FY 1990 program includes follow-on funding for the Avionics Modernization Program (AMP) and provides for four new start reliability and maintainability modifications. The program continues the Countermeasures Dispenser and NAVSTAR GPS. The FY 1991 program completes the AMP modification and continues the reliability and maintainability efforts.

C-5 (FY 1990 - \$55.7 million; FY 1991 \$56.3 million). The FY 1990 funding continues efforts on a reliability improvement for the Multifunction Detection, Analysis and Recording System (MADARS); a safety enhancement to the pylon, and the Automatic Communications Processor operational improvement. Funding is also continued for eight reliability and maintainability modifications.

The FY 1991 program continues funding for MADARS, Expanded Fan Speed Indicator, Pylon Fire Safety Improvement and six reliability and maintainability modifications.

C-141 (FY 1990 - \$31.2 million; FY 1991 - \$42.7 million). The FY 1990 program continues modifications to the All Weather Landing System/Autopilot and the Automatic Communications Processor. A reliability/maintainability improvement to the Fuel Quantity Indicating System is initiated. The FY 1991 program continues funding for these three modifications.

A/T-37 (FY 1990 - \$16.9 million; FY 1991 - \$19.6 million). FY 1990 continues the Structural Life Extension Program (SLEP) to ensure the service life of the T-37 and preclude flight safety structural problems. The reliability/maintainability improvement for the Simulator Computer Replacement is also continued. FY 1990 initiates a safety improvement to the Redundant Elevator Control System.

The FY 1991 program continues the SLEP, Simulator Computer Replacement and Redundant Elevator Control System modifications.

T-38 (FY 1990 - \$12.7 million; FY 1991 - \$21.8 million). The FY 1990 program continues reliability/maintainability improvements including Improved Brakes, Simulator Computer Replacement and the Very-High Frequency Omni-directional Range/Instrument Landing System Replacement. FY 1990 initiates a safety modification which will redesign and strengthen structural components of the cockpit enclosure, and a reliability/maintainability improvement to the Engine Stage II Compressor Blade.

The FY 1991 program continues funding for the Cockpit Enclosure, Simulator Computer Replacement and Stage II Compressor Blade modifications.

C-130 (FY 1990 - \$118.3 million; FY 1991 - \$128.2 million). FY 1990 continues funding for the Self-Contained Navigation System (SCNS), the HF Auto Comm Processor, Airborne Command, Control and Communications Capsules, Microwave Landing System, APQ-122 Radar, ASD-5 Replacement Low Light Level TV, Autopilot, Electrical System, Fuel Quantity and several other reliability improvements. FY 1991 will begin the Have Sync radio replacement for the ARC-186 VHF AM/FM radios.

FY 1991 continues funding for the above programs as well as NAVSTAR GPS. One reliability new start will begin for the Digital Instrument Display.

SOF C-130 (FY 1990 - \$118.1 million; FY 1991 - \$63.5 million). This funding line provides funds required to support eight C-130 Special Operation Forces modifications.

C-135 (FY 1990 - \$ 485.5 million; FY 1991 - \$497.1 million). Funding in FY 1990 is for continuation of the re-engineing of the KC-135 tanker aircraft with CFM-56 engines. This program includes modification to over 25 subsystems necessary to incorporate the new engine. It provides an increase of off-load capability equivalent of one and one half times the current KC-135A configuration. Other modification

programs being continued are Automatic Data Processing and MILSTAR for the EC-135. FY 1990 initiates funding for the NAVSTAR Global Positioning System, Automatic Communications Processor, Ground Collision Avoidance System, Microwave Landing System and Groundwave Emergency Network. The FY 1991 program continues existing modifications and initiates the High Power Transmitt Set modification.

C-137 (FY 1990 - \$1.7 million; FY 1991 \$1.7 million). The FY 1990 and 1991 programs fund Federal Aviation Administration (FAA) directed service bulletins that are issued against all C-137 type commercial and military aircraft.

KC-10 (FY 1990 - \$12.1 million; FY 1991 - \$6.6 million). FY 1990 funds continuation of the Cargo Loading System, Automatic Communications Processor and FAA directed service bulletins.

The FY 1991 program continues the Automatic Communications Processor and initiates funding for NAVSTAR GPS.

C-9 (FY 1990 - \$5.7 million; FY 1991 - \$1.4 million). FY 1990 continues a number of communications/avionics upgrades including the Very-High Frequency Omni-Directional Range/Instrument Landing System Replacement, Ultra High Frequency and Very High Frequency Communications, Weather Radar Replacement and Distance Measurement Equipment Upgrade. The FY 1991 program provides funding for FAA directed service bulletins.

C-12 (FY 1990 - \$3.5 million; FY 1991 - \$1.0 million). The FY 1990 program initiates an enhancement to navigational capability by installation of the OMEGA Navigation System and provides for conversion of existing engines to a standard commercial configuration. The FY 1991 program continues the engine conversion program.

C-18 (FY 1990 - \$0.2 million; FY 1991 - \$0.2 million). The FY 1990/1991 programs provide for low cost safety, reliability and maintainability modifications.

C-20 (FY 1990 - \$0.2 million; FY 1991 - \$0.2 million). The FY 1990/1991 programs provide for low cost safety, reliability and maintainability modifications.

C-21 (FY 1990 - \$3.9 million; FY 1991 - \$0.1 million). FY 1990 provides for a Digital Electronic Engine Control (DEEC) modification which will improve the operational performance of the engine. FY 1991 funds are for FAA directed Service Bulletins.

E-3 (FY 1990 - \$36.5 million; FY 1991 - \$104.2 million). The FY 1990 program initiates the Electronic Support Measures, a Joint US/NATO program which will allow the E-3 to passively detect, locate, and identify airborne, seaborne and ground base emitters, NAVSTAR GPS and Replacement of Magnetic Tape Transport.

The FY 1991 program continues Electronic Support Measures, NAVSTAR GPS and Have Quick A-Net. The FY 1991 program initiates the Joint Tactical Information Distribution System and primary Memory Upgrade modifications for Block 30/35.

E-4 (FY 1990 - \$18.2 million; FY 1991 \$37.8 million). The FY 1990 program continues the MILSTAR UHF transition equipment and Worldwide Airborne Command Post Automatic Data Processing programs. The FY 1991 program continues the Nuclear Detection System and MILSTAR modifications and funds NAVSTAR GPS.

E-8 (FY 1990 - \$.8 million). The FY 1990 program funds the NAVSTAR Global Positioning System (GPS) capability.

H-3 (FY 1990 - \$0.7 million; FY 1991 \$0.6 million). The FY 1990/1991 programs provide for low cost safety, reliability and maintainability modifications.

H-53 (FY 1990 - \$31.0 million; FY 1991 - \$6.9 million). The FY 1990 program continues reliability/maintainability improvements including the Service Life Extension Program (SLEP), Crashworthy Fuel System and Engine Torque Indicator. The FY 1991 program continues funding for the Crashworthy Fuel System and Engine Torque Indicator.

MH-60 (FY 1990 - \$7.2 million; FY 1991 - \$4.6 million). The FY 1990/1991 programs contain funding for the NAVSTAR Global Positioning System.

OV-10 (FY 1990 - \$2.1 million; FY 1991 - \$3.8 million). The FY 1990 program initiates funding for the HAVE SYNC program which improves electronic countermeasures capability. FY 1991 continues funding for the HAVE SYNC program.

T-43 (FY 1990 - \$10.2 million; FY 1991 - \$0.3 million). The FY 1990 program continues funding for the replacement of the outdated computer in the Undergraduate Navigation Trainer Simulator. Initiates a safety modification to the Attitude Heading Reference System and continues Federal Aviation Administration (FAA) directed service bulletins. The FY 1991 program provides continued funding for FAA directed service bulletins.

TR-1 (FY 1990 - \$22.3 million; FY 1991 - \$18.8 million). The FY 1990 program continues modifications for Aircraft Weight Reduction, the NAVSTAR Global Positioning System, an improved sensor system called Senior Glass, Airborne Recorders, Avionics Update and Advanced Defensive System.

The FY 1991 program continues on-going modification programs for NAVSTAR Global Positioning System, Advanced Defensive System, Senior Glass and Airborne Recorders.

OTHER AIRCRAFT (FY 1990 - \$120.9 MILLION; FY 1991 - \$79.0 million). In FY 1990, funds are required for continuation of previously initiated modifications as follows: Have Quick New Control Head; Aircrew Eye/Respiratory Protection (AERP); Have Quick II Faster Hopping and Increased Power; Improved Detection ALR-46; TTU-205 Field Test Set; ALE-40 Deficiencies; AAQ-10 Common Module Upgrade; Support Equipment Upgrade and Replacement of Paper Tape Input. The FY 1990 program initiates funding for Civil Reserve Air Fleet (CRAF) equipment enhancements and improvements to the MAU-12 Bomb Rack. FY 1990 program also contains the MILSTAR program.

The FY 1991 program continues funding for MILSTAR; AERP; CRAF Equipment Enhancement; Have Quick II Radio Faster Hopping and Increased Power; Improved Detection ALR-46; ALE-40 Deficiencies; AAQ-10 Common Module Upgrade; Support Equipment Upgrade; and MAU-12 Bomb Rack.

SOF Other (FY 1990 - \$6.7 million; FY 1991 \$5.0 million). FY 1990 initiates funding for Interactive Defensive System (IDAS).

Classified Projects (FY 1990 - \$49.9 million; FY 1991 \$49.3 million). These funds are required for the modification of a variety of aircraft and airborne systems used in classified missions which, because of their sensitivity, require the application of special management and security safeguards.

SOF CLASS (FY 1990 - \$9.4 million; FY 1991 - \$9.4 million). These funds are required to support Classified Special Operations Forces modifications.

The following table summarizes funds requirements for Fiscal Years 1988, 1989, 1990 and 1991 by aircraft/category:

MODIFICATION OF IN-SERVICE AIRCRAFT
(\$ IN MILLIONS)

<u>Aircraft/Category</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
B-1	\$ 14.5	\$ 24.5	\$ 73.3	\$ 108.7
B-52	247.2	209.6	218.7	74.3
FB-111	2.1	0	0	0
A-7	10.7	25.2	56.7	22.5
A-10	15.2	22.9	53.3	20.6
F/RF-4	9.1	16.5	94.7	107.9
F-5	2.4	0.2	0	0
F-15	120.3	174.2	254.8	254.6
F-16	73.3	167.5	228.1	300.7
F-111	250.3	124.3	83.8	134.2
C-5	16.9	99.9	55.7	56.3
C-141	0.9	20.1	31.2	42.7
SOF-141	16.2	20.7	0	0
A/T-37	8.5	12.9	16.9	19.6
T-38	16.6	19.8	12.7	21.8

<u>Aircraft/Category</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
C-130	100.9	121.3	118.3	128.2
SOF-130	121.0	106.8	118.1	63.5
C-135	762.2	784.8	485.5	497.1
C-137	1.8	2.0	1.7	1.7
KC-10	11.9	26.0	12.1	6.6
C-9	0.2	6.7	5.7	1.4
C-12	0	0	3.5	1.0
C-18	0	0	0.2	0.2
C-20	0	0	0.2	0.2
C-21	0	0	3.9	0.1
VC-25A	0	1.0	0	0
E-3	21.8	16.4	36.5	104.2
E-4	0	49.0	18.2	37.8
E-8	0	0	0.8	0
H-1	0.7	0.4	0	0
H-3	0.2	0	0.7	0.6
H-53	0.4	30.3	31.0	6.9

<u>Aircraft/Category</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
SOFH53	0	8.5	0	0
H-60	0	0	7.2	4.6
OV-10	0	0	2.1	3.8
T-43	0.6	4.9	10.2	0.3
TR-1	9.9	20.3	22.3	18.8
OTHER	43.9	57.4	120.9	79.0
SOFOTH	0	0	6.7	5.0
CLASSIFIED	42.0	83.3	49.9	49.3
SOFCLF	<u>11.5</u>	<u>18.0</u>	<u>9.4</u>	<u>9.4</u>
TOTAL	\$ 1933.2	\$ 2275.5	\$ 2245.0	\$ 2183.5

STATUS OF AIRCRAFT MODIFICATION PROGRAMS
 FY 1988 Modification of Aircraft
 Programs as of 30 November 1988
 (\$ in millions)

<u>Program</u>	<u>Total</u>		<u>Total</u>	<u>Obligations</u>	<u>Expenditures</u>
	<u>Program</u>	<u>Reprogramming</u>	<u>Value</u>		

Budget
 Activity 5

P-1 No 24-58	1971.3	-38.1	\$1933.2	\$1396.1	\$107.6
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-/Adjustments result from the following actions:

- 15.1: Reprogramming for Space Boosters
- 17.7: Reprogramming for MILPERS
- 5.1: Reprogramming for O&M
- 4.8: Reprogramming for INF Treaty & DODDS School
- + 4.6: Reprogramming from the ALQ-172 program in BA 7, Aircraft. Support Equipment and Facilities to cover the ALQ-172 modification program in BA 5.

STATUS OF AIRCRAFT MODIFICATION PROGRAMS
FY 1989 Modification of Aircraft
Programs as of 30 November 1988
(\$ in millions)

<u>Program</u>	<u>Total Program Appropriated</u>	<u>1/ Total Reprogramming</u>	<u>Total Value</u>	<u>Obligations</u>	<u>Expenditures</u>
Budget Activity 5					
P-1 No 24-58	\$2194.3	+81.2	\$2275.5	\$ 78.0	\$.7

1/Adjustments have been made for the following reasons:

- +102.4: Anticipated reprogramming action for F-16 Airborne Self-Protection Jammer
- 9.0: Inflation reduction
- 6.3: Reprogramming for TACIT Rainbow
- 1.0: Congressional reduction for Consultant/Advisory Services
- 4.9: Anticipated reprogramming for MILPERS

(\$ IN THOUSANDS)

FY1991 Estimate	-	\$3,680,918
FY1990 Estimate	-	\$3,966,968
FY1989 Estimate	-	\$2,994,123
FY1988 Actual	-	\$2,348,176

ACTIVITY: Aircraft Spares and Repair Parts

PURPOSE AND SCOPE: This activity provides funds to buy spare engines and other investment items used to repair aircraft and aircraft support equipment. Investment items are defined as repairable assemblies that are centrally procured and managed. The account has two categories: initial and replenishment spares. The initial spares category funds whole spare engines and engine modules to support initial operations of new aircraft; and new spare parts introduced to the inventory for the first time as a result of new aircraft, modifications, new support equipment, and other production charges (e.g., electronic countermeasure pods and special "black" systems). Additionally, initial spares fund inventory level increases referred to as "new acceptance spares" for additional end items (e.g., more F-15s). The second category, replenishment spares, provides follow-on spares support for all aircraft and aircraft support equipment. The replenishment spares account finances peacetime spares and wartime spares requirements.

JUSTIFICATION OF FUNDS REQUESTED: The initial spares segment of the account has four parts. Part one, "Initial Weapon System Spares", funds engine spares and modules, aircraft spares, and peculiar ground support equipment spares required to support initial operations of new aircraft and inventory increases for additional end items. The second part, "Modification Spares", funds spare parts needed during initial operation of modified airborne systems. "Common Ground Support Equipment (GSE) Spares" and "Other Production Spares" comprise parts three and four and also support initial operations inventory increases. All initial spares represent supportability for initial operations after aircraft acquisition or modification. Any funding shortfalls will equate to lower initial levels of peacetime operating stock and will constrain weapon system availability, readiness, flying hour execution, and sortie production.

The replenishment spares segment of the account has three categories of spares. The first category, Peacetime Operating Stock (POS), supports the peacetime flying hour program and ensures weapon systems are ready to perform their wartime mission. Considering a two to three year procurement leadtime, the FY90/91 funding supports 100% of both the FY92/93 flying hour programs. Of note, this is the first time since FY86 that the POS account has been fully funded and reflects the Air Force's emphasis on maintaining a high state of readiness. The second category, War Readiness Spares Kits (WRSK) and Base Level Self-Sufficiency Spares (BLSS), support the initial 30 days of wartime operations. The FY90 and FY91 funding levels are 9 percent and 5 percent, respectively. The last category, Other War Reserve Materiel (OWRM), provides spares and repair parts to continue wartime operations until the industrial base can meet wartime production requirements. Due to fiscal constraints, no funds are requested for OWRM. The WRSK/BLSS and OWRM categories are the key to wartime sustainability.

The following table compares program funding/requests by fiscal year:

AIRCRAFT SPARES AND REPAIR PARTS
(\$ in Millions)

	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
Initial Aircraft Spares	452.9	1007.7	1528.2	1288.6
Replenishment Aircraft Spares	1895.3	1986.5	2438.8	2392.3
Total	2348.2	2994.1	3967.0	3680.9

Initial Aircraft Spares: The initial spares funding requirements are presented in more detail in the following table:

INITIAL AIRCRAFT SPARES
(\$ in Millions)

	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
Initial Weapon System Spares	300.9	813.0	1354.5	1065.6
Initial Modification Spares	60.2	94.8	111.6	141.8
Initial Common GSE Spares	16.6	27.4	22.1	52.7
Initial Other Production Spares	73.2	72.5	39.8	28.5
Total Initial Spares	452.9	1007.7	1528.2	1288.6

The largest segment of this request is for Initial Weapon Systems Spares. Requested funding of \$1354.5 million in FY90 and \$1065.6 million in FY91 will support initial operations of the in-production aircraft shown in the following table:

INITIAL AIRCRAFT SPARES REQUIREMENTS
(\$ in Millions)

Aircraft	FY88		FY89		FY90		FY91	
	Proc	Request	Proc	Request	Proc	Request	Proc	Request
AC-130U	-	-	6	8.9	5	30.1	0	42.4
MC-130H	7	28.5	4	17.6	2	41.1	0	5.7
MH-60G	-	-	18*	3.5	4	2.8	4	2.2
F-15	42	97.3	36	103.6	36	105.7	36	89.7
F-16	180	164.1	180	213.3	150	250.6	150	178.3
CLASSIFIED PROGRAMS	-	-	-	-	-	-	-	-
B-2	-	-	-	-	-	-	-	-
C-17A	2	11.0	4	103.7	6	287.7	10	250.5
C-27	-	-	-	-	5	10.1	5	10.3
Tanker-Transport Training System	-	-	1	0	14	0	28	0
TOTAL WEAPON SYSTEM SPARES		300.9		813.0		1354.5		1065.6

* 9 each MH-60Gs are for the Air Force Reserve

The second largest driver of initial spares requirements is the aircraft modification program. A minimum spares inventory valued at \$111.6 million is needed in FY90 and \$141.8 million in FY91 to support initial operations for over 200 modifications on various aircraft totaling \$2245.0 million in FY90 and \$2183.5 million in FY91. The requested amount represents only 61 percent of the FY90 and 80 percent of the FY91 total mod spares requirement. To enhance their effectiveness, modifications to special operations forces aircraft require new spares valued at \$12.6 million in FY90 and \$38.6 million in FY91. Classified modifications to current systems will require initial spares funding of \$40.6 million in FY90 and \$38.6 million in FY91.

The third segment of the request is for Initial Other Production Spares. The FY90 request is for \$39.8 million and \$28.5 million in FY91. This request includes providing early-on spares support for the Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN), \$9.0 million in FY90 and \$5.0 million in FY91. The request also includes \$3.7 million for F-111 Radar Warning Receiver updates in FY90 and \$6.0 million for the NAVSTAR Global Positioning System in FY91. The remainder of the requests support various electronic warfare projects.

The fourth segment, Initial Ground Support Equipment (GSE) Spares support replacement and newly introduced Ground Support Equipment. The request is for \$22.1 million in FY90 and \$52.7 million in FY91.

Spares and Repair Parts for Air National Guard and Air Force Reserve:

Within the Initial Spares and Replenishment Spares accounts are dollars to support the Air National Guard (ANG) and Air Force Reserve (AFR). However, it's important to recognize that our item specific spares requirements are based upon worldwide need and not broken down by command or component. We buy spares to fill the inventories and provide assets to users based on their designated distribution priority. These priorities are established annually for every Active, Guard, or Reserve unit based on the unit's assigned mission, alert status and wartime mission. Indeed, some Guard and Reserve units have distribution priorities higher than active units. The bottom line is that we compute requirements and buy items to provide balanced support to all Air Force units regardless of the user. In short, our computational system is "user-blind".

To calculate the Air National Guard/Air Force Reserve dollars that are displayed on the President's Budget P-1R Exhibit, we estimate using historical factors for initial modifications spares and cost per flying hour for replenishment spares.

	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
Initial Spares	8.5	17.3	6.9	5.5
Replenishment Spares	363.6	337.4	374.8	408.9
Total	372.1	354.7	381.7	414.4

Replenishment Aircraft Spares: 100 percent of the peacetime operating requirements are funded in FY90 and FY91 but the FY90/91 Biennial Budget reflects the cumulative effects of reduced appropriations in FY88 and FY89 and Service reductions based on fiscal guidance for FY90 and FY91. Overall, the replenishment spares account is funded at 43 percent of the total FY90 requirement and 38 percent of the FY91 requirement. Funding allocations represent financing peacetime Operating Stocks at 79 percent in FY88, 83 percent in FY89, 100 percent in FY90 and 100 percent in FY91. For War Readiness Spares Kits/Base Level Self-Sufficiency Spares, FY88 was funded at 47 percent, no funding was available in FY89, 9 percent in FY90 and 5 percent in FY91. Again, there are no dollars available for Other War Reserve Materiel from FY88 through FY91. The replenishment spares funding requirements are presented in more detail in the following table:

REPLENISHMENT AIRCRAFT SPARES
(\$ in Millions)

	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
POS	1708.2	1986.5	2277.8	2276.9
WRSK/BLSS	187.1	0	161.0	115.4
OWRM	0	0	0	0
TOTAL	1895.3	1986.5	2438.8	2392.3

A complete breakout by weapon system of all requirements and funding follows the narrative discussion.

Peacetime Operating Stock (POS)

The FY90/91 replenishment spares program supports 100 percent of the Air Force's peacetime training requirement. The requirement is based on an item-specific, failure/demand driven computation that supports the flying hour program leadtime away. Considering an average two to three year leadtime, the FY92 program of 3.3 million flying hours will be supported with FY90 funds, and the FY93 program of 3.4 million flying hours will be supported with FY91 funds. Failure to provide funds will result in inadequate spares levels to support critical combat training. Without these spares, available wartime stocks will be used excessively to support peacetime combat training, degrading both readiness and sustainability. The largest drivers of the POS spares request are the F-111, C-135, F-15, F-16 and their supporting engines. Even as the Air Force increases its inventory for new weapon systems/force structure, continued investment is required for new items in support of modifications or changing item requirements for existing inventory.

War Readiness Spares Kits/Base Level Self-Sufficiency Spares (WRSK/BLSS): WRSK/BLSS is the segment of war reserve materiel maintained at base level for units tasked with wartime missions.

a. War Readiness Spares Kits are air transportable packages of spares that will support specific units tasked to deploy for the first 30 days of a war. The basic configuration of a WRSK is determined by the maintenance concept of the spares, i.e., Remove and Replace (RR) as opposed to Remove, Repair and Replace (RRR). The WRSKs are configured and include both the RR and RRR maintenance concepts depending on the base level repair available at the deployed site. The using major commands and the Air Force Logistics Command determine those essential items to be included in the WRSK. These represent only a small portion of the total number of spares used on a day-to-day basis in peacetime. The quantity of items included in the WRSK are computed using factors such as item wartime failure rates, number of items per aircraft, the wartime flying hour program, base repair time, and item pipeline time. These factors are reviewed annually with the using commands and System Program Manager to insure that item mix and quantities support the wartime scenario.

b. Base Level Self-Sufficiency Spares (BLSS) are spares designed to augment peacetime assets to support the initial increased wartime activity for units that will fight the war in-place. BLSS requirements consider the same factors as those used in the WRSK computation, but also consider existing peacetime capability. Those units which are authorized a WRSK are not authorized a BLSS.

The FY90/91 Biennial Budget provides funding levels of \$161.0 million and \$115.4 million against the total FY90/91 War Readiness Spares Kits/Base Level Self-Sufficiency (WRSK/BLSS) requirement of \$1860.0 million in FY90 (9 percent) and \$2401.9 million in FY92 (5 percent). The funding represents a very minor, but essential, start toward recovering from the shortfall in FY88 and the zero funding in FY89. Approximately 27 percent of new WRSK/BLSS kits authorized for FY91/92/93 new aircraft deliveries and new beddowns of F-15s, F-16s, C-17s, F-111s, B-52s, KC-135s and Special Operations Forces (SOF) aircraft will be procured. FY90/91 marks the third and fourth consecutive year of no funding for strategic, mobility, tactical and SOF kit updates.

Other War Reserve Materiel (OWRM)

OWRM is the prestocked segment of war reserve materiel stored at the Air Force Logistics Command (AFLC) depots. These spares are required to sustain forces at wartime levels after day 30 of the war and until the industrial base can be expanded to satisfy wartime requirements. Like WRSK/BLSS, OWRM requirements are also jointly reviewed by the using major commands and AFLC to ensure only combat essential items are designated for OWRM. The resulting OWRM requirements are then reduced by assets available from production, peacetime levels and WRSK/BLSS levels. The Defense Guidance constrains the requirement objective based on mid-term and long range resource plans. For FY90/91, OWRM requirements reflect needs to satisfy the mid-term sustainability objectives although no funding is requested due to fiscal constraints.

(In Thousands of Dollars)	
Program Estimate	- FY 91 \$1,321,672
Program Estimate	- FY 90 1,428,919
Program Estimate	- FY 89 1,619,315
Program Actual	- FY 88 3,445,477

ACTIVITY: Aircraft Support Equipment and Facilities

PART I PURPOSE AND SCOPE

This activity provides for common support equipment required to service and test aircraft and their components; for refurbishment and rehabilitation of Government owned industrial machinery, equipment and facilities required in the manufacture of items funded by this appropriation; for those war consumable items required to be on hand for immediate use in the event of war and to replace those consumed in peacetime training; and for other charges such as electronic countermeasure equipment. The activity also provides for procurement of flight simulation equipment for aircraft that are no longer in production and for programs not associated with one specific weapon system.

PART II JUSTIFICATION OF FUNDS REQUESTED

The estimate for this activity is comprised of the following items: (In Millions of Dollars)

<u>LINE ITEM</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Common Ground Equipment	\$194.1	\$234.7	\$298.5	\$347.6
Common Ground Equipment (SOF)	4.0	14.3	109.2	14.1
Industrial Responsiveness	41.4	23.2	57.6	43.3
War Consumables	29.0	20.4	51.9	53.7
Other Production Charges	2,977.3	1,075.6	673.5	657.8
Other Production Charges (SOF)	2.3	2.6	9.4	9.6
Common ECM Equipment	197.4	248.5	228.8	195.6
ACTIVITY TOTALS	\$3,445.5	\$1,619.3	\$1,428.9	\$1,321.7

Common Ground Equipment

This program is for the procurement of organizational and base level support equipment, both common and peculiar, for out-of production aircraft, as well as common support equipment for new aircraft entering the inventory. The equipment is used on the flight line and in maintenance shops. The program also provides for the procurement of the flight simulators and other training devices for the B-1B and other out-of-production aircraft models. On an exception basis, the program is used to procure depot support equipment. Support equipment includes items that are required to assist or provide a service or maintenance to a weapon system while on the ground. Aircraft support equipment is concentrated in the following Federal Stock Groups (FSG):

FSG 17 - Aircraft launching, landing, and ground handling equipment (trailers, platforms, slings).

FSG 41/45 - Compressors, pumps, and air conditioners.

FSG 49 - Maintenance and repair shop equipment (test stands, maintenance stands, fixtures, noise suppressors).

FSG 61/66 - Electrical generators and power distribution equipment, instrument and laboratory equipment, hardness testers and non-destructive inspection equipment.

Other FSGs - Gauges, nitrogen servicing units, and specialized tools.

The following table shows a comparison, by year and category, for support equipment:

(In Millions of Dollars)

<u>NSG</u>	<u>DESCRIPTION</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
17	Ground Handling Equip	37.0	29.1	24.3	12.9
41/45	Air Cond, Compressors	19.6	14.9	21.1	24.2
49	Maint & Rep Shop Equip	42.4	64.9	94.0	80.8
61/66	Power & Distrib Equip	22.0	27.7	114.7	165.6
Other	Other Natl Stock Gps	63.4	92.4	44.3	61.8
Com Train Equip	Simulators	9.8	5.6	.1	2.3
		194.1	234.7	298.5	347.6
TOTAL COMMON GROUND EQUIPMENT*					

*May not add due to rounding.

Common Aerospace Ground Equipment - SOF

FY 89 - 91 are the critical years in developing a supportable Special Operation Force structure, postured for sustained operations. The nominal funding line for SOF common support equipment (SE) peaks in FY 90 with the procurement of the majority of all SE for avionics and electronics warfare systems for the MH-53J, the C-139E, the HC-130P/N, and the C-141B. The peak in FY 90 is accentuated by the addition of \$53M to provide for the SOF Aircrew Training System. Both aspects of the FY90/91 program; the continued procurement of critical SE and the non-recurring investment in aircrew training, are indispensable components in establishing a viable and effective low intensity military option.

(In Millions of Dollars)

Common Aerospace Ground Equipment - SOF	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
	4.0	14.3	109.2	14.1

INDUSTRIAL RESPONSIVENESS

The Air Force Industrial Base Program (IBP) combines the resources of several appropriations to create a comprehensive IBP. The goal being to ensure that the defense industry is capable of supplying reliable, cost-effective, systems and components to operational commanders in peacetime and national emergencies. The program acknowledges the industrial base as a vital element in war deterrence and sustainability. Major elements in the overall program include management of thirteen government-owned industrial plants, support for the Air Force Manufacturing Technology (MANTECH) and Industrial Modernization Incentives Programs (IMP), Production Surge and industries within the industrial planning. These activities characterize the critical sectors and industries within the industrial base, make recommendations to resolve industrial deficiencies and bottlenecks, and where appropriate, execute plans of action designed to enhance the industrial base. Funds in this appropriation are to support the aircraft procurement segment of the Air Force IBP. Although the elements of cost are broken down more finely, in FY 90-91 three basic activities are to be funded through this appropriation:

- (1) Air Force Industrial Plants. Consists of repair and expansion, major rehabilitation, environmental compliance, equipment movement and energy conservation at 13 DOD-owned, contractor-operated industrial facilities. These plants are the backbone of AF weapon system assembly for the B-1B, B-2, F-15, F-16, Harpoon, F-18, F-111, C-130, C-5B, cruise missiles, jet engines, Minuteman, hydrazine, Maverick, Phoenix, AMRAAM, and TOM systems. Funds are also provided for the packing, crating and handling required to prepare and transfer idle government-owned equipment to other locations.
- (2) Industrial Planning. Provides for analysis of problems, constraints, and opportunities in the aircraft sector to ensure the base can produce in peacetime and can accelerate deliveries of critical items during national emergencies. The collection, maintenance and use of this data is essential to support affordable sustainability and readiness.
- (3) IMIP or Technology Modernization: IMIP is a joint venture between government and industry to accelerate the implementation of modern equipment and management techniques. IMIP provides a contractual link to encourage more aggressive industrial investments by DoD contractors. The program offers financial incentive to achieve cost reduction through investment in productivity enhancing equipment. Defense contractor profits are to a large extent a function of their costs. This is a disincentive to invest in cost-reducing, expensive capital equipment. Industry also copes with uncertainties in forecasting future DoD business. The purpose of IMIP is to mitigate the effects of negative incentives by sharing productivity-related savings.

UNCLASSIFIED

PROGRAM COST BREAKDOWN										DATE
										JAN 89
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE								
AIRCRAFT PROCUREMENT, BPAC 1400		INDUSTRIAL RESPONSIVENESS								
		(Total cost in thousands of dollars)								
ELEMENT OF COST	IDENT	FY 1988	FY 1989	FY 1990	FY 1991					
	CODE	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
A. Expansions	1000		0	.057	1.633		1.230			
B. Packing, Crating & Handling	2000		.030	.579	2.348		1.593			
C. Capital Type Rehabilitation	3000		1.594	8.071	29.190		12.300			
D. Replacement & Modernization	4000		0	0	0		0			
E. Planning	6000		2.000	.998	3.101		3.523			
F. Environmental Protection	7000		25.108	3.629	6.592		9.351			
G. Industrial Modernization (IMIP)	8000		12.600	9.888	14.702		15.351			
H. Energy Conservation	9000		0	0	0		0			
TOTALS			41.412	23.220	57.568		43.348			

UNCLASSIFIED

EXHIBIT P-22

1. COMPONENT USAF		FY 19 ⁹⁰ FACILITY PROJECT DATA			2. DATE 7 Jul 88	
3. INSTALLATION AND LOCATION Air Force Plant 4 Fort Worth TX			4. PROJECT TITLE MPC 1000 Expansion Add Security Lighting			
5. PROGRAM ELEMENT 0708011F		6. CATEGORY CODE 221-221	7. PROJECT NUMBER N/A		8. PROJECT COST (\$000) \$730.00	
9. COST ESTIMATES						
ITEM			U/M	QUANTITY	UNIT COST	COST (\$000)
Add Security Lighting in Four Areas			L/S			\$730.00
10. DESCRIPTION OF PROPOSED CONSTRUCTION						
<p>Provide and install additional exterior security lighting in each of the following areas:</p> <p style="margin-left: 40px;">Area 1 - The area east of Buildings 162-167 (aircraft run stations).</p> <p style="margin-left: 40px;">Area 2 - The area around the domestic water supply facilities (Bldg 40 - Pump House, Facility #39: two 200,000-gallon reservoirs, and Facility #151: one 2,000,000-gallon reservoir).</p> <p style="margin-left: 40px;">Area 3 - Parking Lot #5 plus adjacent ramp and work area (northwest perimeter area).</p> <p style="margin-left: 40px;">Area 4 - The area along the shore of Lake Worth (north perimeter).</p> <p><u>BASIS OF NEED:</u></p> <p>The additional lighting is required to serve as a deterrent to illegal/unauthorized activity and to aid security personnel and employees in the detection of any illegal/unauthorized activity in these areas.</p> <p><u>IMPACT IF NOT PROVIDED:</u></p> <p>The facility will continue to be in violation of security lighting practices and will remain as a high risk to high value property damage and possible production shut down.</p>						

1. COMPONENT USAF		FY 1990 FACILITY PROJECT DATA		2. DATE 07 Jul 88	
3. INSTALLATION AND LOCATION Air Force Plant 4 Ft Worth TX			4. PROJECT TITLE MPC 7000 Environmental, Removal and Replacement of Underground Storage Tanks, PH III		
5. PROGRAM ELEMENT 0708011F		6. CATEGORY CODE 221-221	7. PROJECT NUMBER N/A		8. PROJECT COST (\$000) \$730.00
9. COST ESTIMATES					
ITEM			U/M	QUANTITY	COST (\$000)
Replacement and Removal of Underground Storage Tanks. Phase III of III.			L/S	-----	\$730.00
10. DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>This project is the last phase of three-year plan to replace all underground tanks that store petroleum or hazardous chemical products. Requirements for this last phase are for replacement and closure of approximately five (5) tanks with associated monitoring and testing of the tanks. Wherever possible, tanks will be replaced with above ground storage protected with secondary containment. If below surface storage is required, preference will be given to vaulted storage with secondary containment and inspection provisions to be provided at the vault.</p> <p><u>BASIS OF NEED:</u> The Hazardous and Solid Waste Amendments (HSWA) of 1984 require the Environmental Protection Agency (EPA) to publish regulations for underground tanks that store petroleum products or chemical products defined as Hazardous by Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The law is based on the concept that all underground tanks will eventually leak, causing release of a hazardous material to the environment. Regulations will require specific leak detection or tank testing for existing tanks. Releases from underground tanks will continue to require expensive remedial standards and leak detection requirements. This project will eliminate or minimize the risk of leaks from underground tanks.</p> <p><u>IMPACT IF NOT PROVIDED:</u> Continued risk of tank leakage, resulting in expensive remediation efforts.</p>					

1 COMPONENT USAF		FY 1990 FACILITY PROJECT DATA			2 DATE 07 Jul 88	
3 INSTALLATION AND LOCATION Air Force Plant 4 Ft Worth TX			4 PROJECT TITLE MPC 1000 Expansion Construct Security Office Annex			
5 PROGRAM ELEMENT 0708011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER N/A		8 PROJECT COST (\$000) \$300.00
9 COST ESTIMATES						
ITEM				U/M	QUANTITY	UNIT COST
Construct security office annex between Bldgs 9 and 10.				LS	-----	\$300.00
10 DESCRIPTION OF PROPOSED CONSTRUCTION						
<p>Provide approximately 1,800 square feet of additional office space for AFP 4 security functions by expanding and adjoining Bldgs 9 and 10. This will include a concrete floor slab, steel frame structure, exterior brick walls and a built-up roof to enclose the area between the two buildings. Provide appropriate utility systems for the new office area. Rehabilitate and remodel the existing buildings, approximately 3,900 square feet in Bldg 9 and 5,500 square feet in Bldg 10.</p> <p><u>BASIS OF NEED:</u></p> <p>The implementation of secure programs at AFP 4 has generated a requirement for additional office space to house an expanded Investigative Service plus a special DoD Security Task Force. These individuals require immediate access to the records and other security functions which are located in Bldgs 9 & 10. It would not be feasible to relocate the security functions because no space is available in other facilities and all of the communication, monitoring, and signal networks are terminated in Bldgs 9 and 10. Expanding and adjoining Bldgs 9 and 10 will provide the required space without disrupting other security functions. Rehabilitation and remodeling of Bldgs 9 and 10 is required to provide the most efficient and effective utilization of the available office space.</p> <p><u>IMPACT IF NOT PROVIDED:</u></p> <p>If not provided, efficient security operations in support of the F-16 program will be jeopardized.</p>						

1 COMPONENT USAF		FY 1990		FACILITY PROJECT DATA		2 DATE 07 Jul 88	
3 INSTALLATION AND LOCATION Air Force Plant 4 Ft Worth TX				4 PROJECT TITLE MPC 7000 Environmental, Secondary Containment & Rain Protection---All Tanks			
5 PROGRAM ELEMENT 0708011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER N/A		8 PROJECT COST (\$000) \$1350.00	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Secondary Containment and Rain Protection for All Tank Systems.				L/S	-----	-----	\$1,350.00
10 DESCRIPTION OF PROPOSED CONSTRUCTION Provide concrete or asphaltic concrete secondary containment basins or berms, double-walled underground piping, steel frame rain protection covers at approximately thirty (30) storage tank locations. BASIS OF NEED: Required to prevent discharge of hazardous substances in accordance with the Clean Water Act. The project will also reduce liability for such releases created by the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). IMPACT IF NOT PROVIDED: Continued risk of a leak or rupture of an existing storage system that can result in potential discharge of hazardous substances to waters of the contiguous zone of the United States. Such releases will create immediate emergency response needs and create potentially very costly remediation. Undetected slow releases from underground lines can also result in very costly remediation efforts.							

1 COMPONENT USAF	FY 1990 FACILITY PROJECT DATA		2 DATE 07 Jul 88	
3 INSTALLATION AND LOCATION Air Force Plant 42 Palmdale CA		4 PROJECT TITLE MPC 1000 Expansion Install Auxilliary Water Well		
5 PROGRAM ELEMENT 0708011F	6 CATEGORY CODE 221-221	7 PROJECT NUMBER N/A	8 PROJECT COST (\$000) \$600.00	
9 COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
Install Auxilliary Water Well at Site 7.	L/S	-----	-----	\$600.00
10 DESCRIPTION OF PROPOSED CONSTRUCTION Provide an approximate 600 ft deep well and water distribution system to connect to existing potable water system. <u>BASIS OF NEED:</u> Provides a backup potable water supply for the existing single well at Site 7 which is one of the few sites which have only one water well at AFP 42. Back up water supply is mandatory for the increasing mission. <u>IMPACT IF NOT PROVIDED:</u> Lack of a backup potable water source could result in extensive mission production delays.				

(7
C)

BP 1700 WAR CONSUMABLES
FY90/91 PRESIDENT'S BUDGET
(\$ MILLIONS)

	FY 1988	FY1989	FY1990	FY 1991
	QTY	QTY	QTY	QTY
	\$	\$	\$	\$
<u>FUEL TANKS/PYLONS</u>				
370 GALLON TANK/PYLON/UNIT	2902	-0-	1500	1560
(F-16)				
CENTERLINE PYLONS (F-15)	76	-0-	-0-	-0-
	20.933	-0-	16.032	16.771
	3.372	-0-	-0-	-0-
<u>MISSILE LAUNCHERS</u>				
LAUNCHER ELECTRONICS ASSEMBLY	1035	-0-	-0-	-0-
(LAU-117)				
LAU 128/129 (F-15/F-16)	-0-	470	889	816
	-0-	20.399	35.892	36.891
<u>TOTAL</u>	29.000	20.399	51.924	53.662

Other Production Charges

This program provides for items, such as Classified Projects, Alternate Mission Equipment, and Range Improvement, that are not directly related to other procurement lines in this appropriation and cannot be reasonable allocated and charged thereto. It also includes items, such as LANTIRN, NAVSTAR GPS, that are used by more than one weapon system and managed as end items themselves. The following table provides a comparison, by fiscal year, of the items in this program:

	(In Millions of Dollars)*			
	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Classified Projects	2098.4	279.2	219.8	270.4
ECM Support	0.9	7.9	9.2	9.9
Range Improvement	15.6	16.8	6.4	7.5
LANTIRN	748.5	685.0	353.2	277.9
AVTR/CAVR/CTVS	4.7	3.1	15.1	6.7
NAVSTAR Global Positioning System	69.3	54.1	46.4	41.0
GBU-15	-	-	4.5	17.2
TR-1	40.0	-	10.7	8.1
Training (Offensive)	-	4.8	1.2	-
TACIT RAINBOW	-	24.4	7.0	18.9
Sailplanes	0.1	-	-	-
Total Other Production Charges	2977.3	1075.6	673.5	657.8

*Dollars may not add due to rounding

Classified Projects:

Includes the Air Force Tactical Improvement Program and national defense projects which are classified Special Access.

ECM Support:

The program procures electronic warfare and airborne photography/reconnaissance equipment to provide countermeasure capabilities against changing enemy electronic defenses or for other unpredictable and urgent operational requirements.

Range Improvement:

This is a joint Air Force/Navy program to procure pods which provide accurate kill/no kill data for assessment of tactics and aircrew training at the Air Combat Maneuvering Range. The pod is mounted on a standard launch rail and transmits airspeed, altitude, angle of attack, and weapons information to ground stations.

Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN):

The LANTIRN navigation and targeting pods being procured within this project provide an air-to-ground electro-optical fire control system emphasizing FLIR, terrain following radar, and aircraft integration with Head-up Display (HUD) for flying low while critical battlefield targets are acquired, recognized, and weapons are launched.

AVTR/CAVR/CTVS:

Tactical and strategic aircraft are equipped, or are being modified for inclusion of the AVTR (Airborne Video Tape Recorder) or its compact version the CAVR (Compact Airborne Video Recorder), and the CTVS (Cockpit TV Sensor). The AVTR/CAVR are replacing the traditional film gun camera as the standard combat/training documentation device, and will record cockpit audio as well as video displays. The CTVS is a small solid state TV camera used in the recording of the Head-Up-Display data to be recorded on the AVTR/CAVR. The AVTR/CAVR provide 30 minutes (vice 3 on the gun camera) recording time which does not need processing, and is available for flight debriefing/instruction immediately after landing. The use of these systems provides improved cost-effective training documentation to enhance combat capability. The Tactical Air Forces Armament Recording Program emphasized the importance of this requirement.

NAVSTAR Global Positioning System:

NAVSTAR GPS is a space-based radionavigation system which will provide users their position (accurate to 16 meters), velocity (.1 meters per sec) and time (.1 microsecond) on a 24 hour per day, all weather, worldwide basis. The GPS satellite segment is in production and will provide an initial operational capability in FY 1987 and its full capability in FY 1988. The DoD policy is for GPS to replace all existing radionavigation systems on military aircraft by the mid 90s. This appropriation funds NAVSTAR GPS user avionics for all USAF aircraft plus the Air Force share of GPS production start-up costs.

GBU-15 Improved Data Link:

The GBU-15 is a data link controlled precision guided glide bomb. Funds provide improvements to the anti-jam capabilities of the data link.

TR-1:

This program provides funds for the modification of the existing TR-1 ASARS radar to give the system a moving target indicator ability, and for the TR-1 reengining.

Training (Offensive):

Funds are to support the Strategic Training Route Complex (STRC), and procurement of Seekscore and other training equipment. The STRC will be composed of a multitude of interconnecting low level routes which will be equipped to provide a multi-threat electronic warfare environment and radar bomb scoring capability.

TACIT RAINBOW:

Funds procure the AGM-136 rotary launchers.

Other Production Charges - SOF:

Funds are for nonrecurring engineering support, software development data and installation efforts for the gunship, and reliability and maintainability efforts.

	(In Millions of Dollars)		
	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>
Other Production Charges - SOF	2.3	2.6	9.4
			9.6

Common ECM Equipment

Includes the procurement of new pods, such as the ALQ-131 Block II and ALQ-184 to counter the latest Soviet threats. The pods are used on several tactical strike/reconnaissance aircraft. Funds also purchase the ALR-621 self protection suite.

(In Millions of Dollars)			
	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>
Common ECM Equipment	197.4	248.5	228.8
			195.6

COMPARISON OF FY 1988 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1989 BUDGET WITH FY 1988 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1990 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1989 Budget	Total Program Requirements Per 1990 Budget	Increase + or Decrease -
Combat Aircraft	\$4,450,968	\$4,362,268	-\$88,700
Airlift Aircraft	655,300	654,200	-1,100
Trainer Aircraft	0	0	0
Other Aircraft	12,200	87,200	+75,000
Modification of In-Service Aircraft	1,942,127	1,933,207	-8,920
Aircraft Spares and Repair Parts	2,375,687	2,348,176	-27,511
Aircraft Support Equipment and Facilities	3,492,777	3,445,477	-47,300
Reimbursable Program	181,000	228,748	+47,748
Total Fiscal Year Program	\$13,110,059	\$13,059,276	\$-50,783

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (-\$88.7 million). The decrease is the net result of funds from the F-15 (-\$50M) and F-16 (-\$48.7M) being made available for reprogramming to a higher priority effort; and a below threshold reprogramming to the MC-130H (+\$10M) to fund a non-recurring cost increase.
2. Airlift Aircraft - (-\$1.1 million). The decrease to the program is the result of a reprogramming action on the C-17 program to make funds available for a higher priority effort.
3. Trainer Aircraft - (\$0 million). No change.
4. Other Aircraft - (+\$75.0 million). The increase is the result of a reprogramming action on the C-29 aircraft for procurement of six airplanes to replace obsolete flight inspection aircraft.

5. Modification of In-Service Aircraft - (-\$8.9 million). The decrease is the result of reprogramming actions to higher priority programs. Funds available due to contract savings on the C-130, other aircraft, F-15, and H-1.
6. Aircraft Spares and Repair Parts - (-\$27.5 million). The decrease is the result of funds being made available for reprogramming by cancellation of a classified program (-\$14.3M) and reductions/slips in modification programs that reduced initial spares requirements (-\$13.2M).
7. Aircraft Support Equipment and Facilities - (-\$47.3 million). The decrease to the FY 1988 program is the result of reprogrammings actions. These funds were made available for higher priority efforts..
8. Reimbursable Program - (+\$47.7 million). The increase is a result of receipt of more customer orders than anticipated.

COMPARISON OF FY 1988 FINANCING AS REFLECTED
IN FY 1989 BUDGET WITH FY 1988 FINANCING AS
SHOWN IN FY 1990 BUDGET

	(In Thousands of Dollars)		Increase(+) or Decrease(-)
	Financing Per FY 1989 Budget	Financing Per FY 1990 Budget	
Program Requirements	13,110,059	13,059,276	-50,783
Program requirements (Service Account).....	(12,929,059)	(12,830,528)	(-98,531)
Program requirements (Reimbursable).....	(181,000)	(228,748)	(+47,748)
Less:			
Anticipated Reimbursements.....	181,000	228,748	+47,748
Transferred From Other Accounts.....	1,412	1,412	0
Unobligated Balance Transferred from Other Accounts.....		100,000	+100,000
Add:			
Transferred to other accounts	29,180	227,711	+198,531
Unobligated Balance to finance subsequent year budget plans.....	0	0	0
Appropriation.....	12,956,827	12,956,827	0

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1988 program bottom line has remained constant since submission of the FY 1989 Budget. Adjustments by category of financing are explained below.

1. Anticipated Reimbursements. The increase of \$47,748 thousand is due to receipt of more customer orders than anticipated.
2. Transfer to Other Accounts. The increase of \$198,531 thousand is due to anticipated reprogrammings from the Aircraft Procurement Appropriation.
3. Unobligated Balance Transferred from Other Account. The increase of \$100,000 thousand is due to reprogramming for the C-29 aircraft.
4. Program Requirements. The decrease of \$50,783 thousand is the result of reprogramming actions

COMPARISON OF FY 1989 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1989 BUDGET WITH FY 1989 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1990 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1989 Budget	Total Program Requirements Per 1990 Budget	Increase + or Decrease -
Combat Aircraft	\$8,649,152	\$7,635,644	-\$1,013,508
Airlift Aircraft	1,003,978	995,571	-8,407
Trainer Aircraft	9,563	9,525	-38
Other Aircraft	63,897	89,840	+25,943
Modification of In-Service Aircraft	2,078,401	2,275,468	+197,067
Aircraft Spares and Repair Parts	3,138,491	2,994,123	-144,368
Aircraft Support Equipment and Facilities	1,686,518	1,619,315	-67,203
Reimbursable Program	181,000	206,109	-25,109
Total Fiscal Year Program	\$16,811,000	\$15,825,595	-\$985,405

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (-\$1,013.5 million). The decrease is a result of Congressional adjustments to the F-16 (-\$376.0M) and classified programs (-\$187.2M); anticipated reprogramming in classified programs (-\$434.8M) to fund higher priority programs; anticipated reprogramming of the F-16 (-\$102.4M) to realign funds in accordance with current program priorities; anticipated reprogramming on the MC-130H, (+\$125.0M) to fund cost growth; anticipated reprogramming for reduced inflation (-\$30.7M); anticipated reprogramming from the F-15 (-\$5.0) for higher priority programs; and distribution of Congressional undistributed reductions (-\$2.4).
2. Airlift Aircraft - (-\$8.4 million). The decrease is a result of a Congressional adjustment to the C-17 (-\$4.0M); anticipated reprogramming for reduced inflation on the C-17 (-\$4.0M), and distribution of Congressional undistributed reductions (-\$.4M)

3. Trainer Aircraft - (\$0 million). No significant change.
4. Other Aircraft - (+\$25.9 million). The increase is a result of Congressional adjustments to the FY 1989 request (CAP, +1.3M; MH-60G, +\$24.7M).
5. Modification of In-Service Aircraft - (+\$197.1 million). The increase is a net result of Congressional adjustments to the C-135 (+\$180.5M) the F-15 (-\$17.4M), the F-16 (-\$13.4M), other aircraft (-\$20.5M) and various others (-\$13.4M); anticipated reprogramming to the F-16 (+\$102.4M) to properly reflect current program priorities; anticipated reprogramming for reduced inflation (-\$8.7M), and other anticipated reprogrammings (-\$12.4M).
6. Aircraft Spares and Repair Parts - (-\$144.4 million). The decrease is a result of Congressional adjustments to the FY 1989 request (-\$204.4M); anticipated reprogramming involving classified programs (+\$121.9M); anticipated reprogramming for higher priority efforts (-\$50.0M); and anticipated reprogramming for reduced inflation (-\$11.8M).
7. Aircraft Support Equipment and Facilities - (-\$67.2 million). The decrease is a net result of Congressional adjustments to the FY 1989 request (-\$78.3M); anticipated reprogramming for reduced inflation (-\$6.5M); distribution of Congressional undistributed reductions (-\$1.7M); anticipated reprogrammings involving classified programs (+\$15.0M); and other anticipated reprogrammings (+\$4.3M).
8. Reimbursable Program - (+\$25.1 million). The increase is a result of receipt of more customer orders than anticipated.

**COMPARISON OF FY 1989 FINANCING AS REFLECTED
IN FY 1989 BUDGET WITH FY 1989 FINANCING AS
SHOWN IN FY 1990 BUDGET**

	(In Thousands of Dollars)		
	Financing Per FY 1989 Budget	Financing Per FY 1990 Budget	Increase(+) or Decrease(-)
Program Requirements	16,811,000	15,825,595	-985,405
Program requirements (Service Account)			
Program requirements (Reimbursable)	(16,630,000) (181,000)	(15,619,486) (206,109)	(-1,010,514) (-25,109)
Less:			
Anticipated Reimbursements	181,000	206,109	+25,109
Transferred from Other Accounts	-	67,900	+67,900
Add:			
Transferred to Other Accounts	-	365,782	+365,782
Reduction Pursuant to P.L. 100-463	-	5,131	+5,131
Appropriation	16,630,000	15,922,499	-707,501

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1989 program has decreased \$707,501 thousand since submission of the FY 1989 budget. Adjustments by category of financing are explained below:

1. Reimbursements. The increase of \$25,109 thousand is due to receipt of more customer orders than anticipated.
2. Transferred from Other Accounts. The increase of \$67,900 thousand is due to an anticipated reprogramming into the Aircraft Procurement Appropriation for SOF Combat Talon II aircraft.
3. Transferred to Other Accounts. The increase of \$365,782 thousand is due to anticipated reprogrammings out of the Aircraft Procurement Appropriation.
4. Appropriation. The decrease of \$707,501 thousand is the result of Congressional Adjustments to the FY 1989 Budget.

FLIGHT SIMULATOR DATA SHEET

BUDGET YEAR PROGRAM

Simulator Model: F-15E Weapon System Trainer

Aircraft System Supported: F-15E

Description of Simulator: The F-15E WST will train both pilot and weapon system officers and will include Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN) simulation. The trainer will be a modification to the design of the F-15 Operational Flight Trainer already being manufactured by Loral Corp. Four WSTs will be procured.

Development Status: Testing on units #1 and 2 was completed in FY88. Development of the first full mission capable trainer, unit #3 was begun in FY89. Delivery of units #1 and #2 occurred in FY89 to provide safety of flight training. In FY 1989 a contract for unit #4 will be negotiated.

Funding Data:
(In Millions)

	FY 1988	FY 1989	FY 1990	FY 1991
--	---------	---------	---------	---------

Quantity	(0)	(1)	(0)	(0)
RDT&E	.1	.1	0	0
Procurement	15.1	58.0	4.8	26.1
MILCON	---	---	---	---
TOTAL	15.2	58.1	4.8	26.1

Basis for FY 1990/91 Request: In FY 1990 IOT&E testing will occur on unit #3. Updates on units #1 and #2, and delivery of units #3 and #4 will occur.

Contract Data: FFP to Loral Corp.

Cost History Comparison: N/A

FLIGHT SIMULATOR DATA SHEET

BUDGET YEAR PROGRAM

Simulator Model: F-16 Weapon System Trainer (WST)

Aircraft System Supported: F-16 aircraft.

Description of Simulator: The F-16 WST is comprised of an Operational Flight Trainer (OFT), and Electronic Warfare Training Device (EWTd) and a Digital Radar Landmass Simulation (DRLMS) and a visual system. The EWTd will be used to train pilots in the electronic warfare aspects of their mission. The DRLMS will simulate the Air-to-Ground (A/G) modes and displays of the F-16 Fire Control Radar (FCR) using a Defense Mapping Agency (DMA) Digital Data Base (DDB). The visual system permits training in low visibility take-off landing and emergency conditions. The WSTs are developed using a "Building-Block" and phased approach in consonance with the Tactical Air Forces (TAF) F-16 aircraft deployment plan.

Development Status: N/A

Funding Data:
(In Millions)

	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Quantity	(25)	(6)	(4)	(0)
RDT&E	-	-	-	-
Procurement	47.5	70.8	33.9	13.9
MILCON	-	-	-	-
TOTAL	47.5	70.8	33.9	13.9

Basis for FY 1990/91 Request: F-16 WST FY 1990/91 budget is based on the following requirements:

- F-16C Operational Flight Trainers (OFTs) to provide "safety-of-flight" trainers for active units
- Improved Electronic Warfare Training Devices (IEWTDs) for F-16C EW training. Requirement for IEWTDs stressed by F-16 WST General Officer Review, Dec 85.
- LANTIRN simulators to be integrated with Block 40 OFTs to provide LANTIRN training.

- Block 40/50 Operational Flight Trainer (OFT) update for modification and production incorporation. Required to provide "safety-of-flight" OFTs for Block 40/50 aircraft.
- 3 Window Visual System Integrated into WST Block 30/40/50 for realistic mission training.

Contract Data:

OFT Blk 40/50	FFP	F33657-84-C-0173, Options
OFT Blk 30	FFP	F33657-82-C-0138, Options
IEWTD	FFP	F33657-87-C-0168
LANTIRN	FPI	F33657-86-C-2141
IDRLMS	FFP	F33657-81-C-2041
VISUAL SYSTEM	FFP	F33657-88-C-0023

The contractor for the Operational Flight Trainer and LANTIRN simulator is the Singer Company, Link Division, Houston, Tx. The DRLMS is built by the General Electric Co, Simulation and Control Systems Department, Daytona Beach, Fl. The IEWTD is built by the AAI Corporation of Cockeysville, MD, and the visual system is built by Evans & Sutherland, Salt Lake City, UT.

Cost History Comparison: The changes from FY 90 President's Budget to FY 91 request are required to match aircraft beddown plans.

SIMULATOR MODEL: C-17 AIRCREW TRAINING SYSTEM

BUDGET YEAR PROGRAM

Aircraft System Supported: C-17

Description of Simulator: An Aircrew Training System is being developed to be operated by a contractor, McDonnell Douglas Training Systems, Inc, to provide Qualified Aircrew members. The Training System is made up of Computer Based Training (CBT) devices used in a classroom, a cockpit simulator (CSS), Weapon System Trainers (WST), Loadmaster Stations (LST), Cargo Load Model (CLM) and Cargo Compartment Trainer (CCT).

Development Status: Contract was awarded for phase II in FY 89. System Critical Design Reviews will occur in FY 90 and FY 91. First system will be delivered in FY91.

Funding Data: (In Millions)	FY_1988	FY_1989	FY_1990	FY_1991
Quantity	(0)	(0)	(1)	(1)
RDT&E	-	30.0	31.8	5.5
Procurement	-	-	39.3	37.4
MILCON	-	5.0	-	4.2
Total	-	35.0	71.1	47.1

Basis for FY 1990/91 Request: C-17 WST FY 1990/91 budget is based on the following requirements:

- Develop Courseware for 10 Pilot, 7 Co-pilot 7 Loadmaster and 3 Maintenance Engine Run courses.
- Development and in plant testing of training media (CBT, CCS, WST, LST, CLM, and CCT)
- Production of first unit of training media.

Contract Data: FFP contract to McDonnell Douglas Training Systems, Inc., Bedford, Tx on 26 Oct 88 (F33657-88-C0029).

Cost History Comparison: N/A